

922 is disposed over quantum wire 920 and second nitride spacer mask 28 to create a quantum wire double gate in this embodiment. A gate oxide (not pictured) is formed upon the length 56 of quantum wire 920. An insulator 58 may also be formed. Additionally, where quantum wire 920 is to connect with a contact in a contact corridor, a spacer gate [spacer] is to be formed between a contact landing area 60 and gate layer 922 by the traditional method of nitride/oxide deposition and an RIE spacer etch.

Figure 10 is a process flow diagram that illustrates an [the] inventive method embodiment of forming a quantum wire gate. The process 1000 begins at block 1010 with patterning a first oxide upon a substrate. At block 1020 the process continues by forming a first nitride spacer mask upon the first oxide. Next, a first oxide spacer mask is formed at block 1030. The first oxide spacer mask is formed upon the first nitride spacer mask. The process continues at block 1040 by forming a second nitride spacer mask upon the first oxide spacer mask. At block 1050, a plurality of channels is formed in the substrate. The plurality of channels are aligned to the second nitride spacer mask. At block 1060, a gate layer is formed over the plurality of channels. According to the present invention, each of the plurality of channels is narrower than the mean free path of semiconductive electron flow therein.

IN THE DRAWINGS

The drawings were objected under 37 CFR 1.83(a) because they fail to show element 32 in Fig. 1F as described in the specification on page 8. Correction is required.

The Applicant has carefully reviewed the application and hereby submits the following amended informal drawing sheets.

In Figure 1f, element 32 has been added. It is noted that the reference line for element 32 has been drawn to touch the bottom of the trench 32. This convention has been carried out throughout the remainder of the informal drawings, including Figure 2i, Figure 3c, Figure 6, Figure 8, and Figure 9.

Figure 7 has been amended to correct what appears to be a photocopy artifact. The